

## Three new wattles (*Acacia*: Mimosoideae) from the Kalannie region, Western Australia

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### Abstract

Maslin, B.R. Three new wattles (*Acacia*: Mimosoideae) from the Kalannie region, Western Australia. *Nuytsia* 17: 229–240 (2007). The following new taxa are described: *Acacia inceana* Domin. subsp. *latifolia* Maslin, *A. stanleyi* Maslin and *A. synoria* Maslin. The first two taxa are listed as Priority One and the last as Priority Two according to the Department of Environment and Conservation's Conservation Codes for the Western Australian Flora.

### Introduction

The Kalannie region is located largely within the Shire of Dalwallinu, in the north-central wheatbelt region of Western Australia c. 250 km due north-east of Perth, on the boundary between the South-West Botanical Province and the arid zone. The region extends from just south of Kalannie township north to the southern end of Mongers Lake, with Lake Moore and the Rabbit Proof Fence forming the approximate eastern and western boundaries, respectively. The region comprises a gently undulating landscape with broad valley floors, occasional well-defined creek lines, many salt lakes (the remnants of ancient drainage systems) and few granite outcrops. Typical of much of the wheatbelt the Kalannie region is edaphically very complex and biologically very diverse.

The Kalannie region has been extensively cleared for agriculture and as a result it experiences environmental problems such as increasing salinity and water-logging due to rising water tables, soil erosion and loss of remnant vegetation. Control of soil salinisation in the wheatbelt is a significant environmental challenge facing the community today, and in recent years there has been increasing interest in identifying deep-rooted perennial species which might be suited to ameliorating or reversing this and associated problems of land degradation (Bartle *et al.* 2002). Species of *Acacia* Mill. are particularly common in the wheatbelt, including much of the Kalannie region, and as discussed in Bartle *et al.* (*loc. cit.*) and Maslin and McDonald (2004) they have the potential for contributing solutions to the environmental problems of the region through the selection of appropriate species for strategic planting in both recharge and discharge areas. Acacias may be planted for soil stabilisation, incorporated into mixed revegetation programs, used in conservation corridors or as visual screens, windbreaks and shelterbelts; they also have the ability to improve soil nutrient levels by fixing atmospheric nitrogen through rhizobial symbiosis. The *AcaciaSearch* project (see Maslin & McDonald *loc. cit.*) recently assessed the *Acacia* flora of the southern Australian agricultural region and identified 35 species that may be prospective for large-scale commercial planting as a treatment and control for salinity in these areas; a number of these species occur in the Kalannie region.

*Acacia* is the dominant woody land-cover plant group in many parts of the Kalannie region and 70 taxa of this genus are currently recorded for the area. An 18 month project aimed at exploring the potential of these taxa in conservation and landscape amelioration work of the area was commenced in late 1996. This study resulted in the production of a CD ROM titled “Wattles of the Kalannie region” (Maslin 1998). The three new taxa of *Acacia* described below arose from this project. Because of the regrettable delay in formally publishing these taxa their names have been included as manuscript names in some works over the past decade, most notably, the WATTLE CD (Maslin 2001a) and the Department of Environment and Conservation’s (DEC) “Declared Rare and Priority Flora list for Western Australia” (Atkins 2006); however, these taxa were not included in the “Flora of Australia” treatment of *Acacia* (Maslin 2001b).

### New taxa

***Acacia inceana* Domin subsp. *latifolia* Maslin, subsp. nov.**

Ab subspeciebus aliis *Acaciae inceanae* Domin phyllodiis planis, 3–6 mm latis, differt. *Phyllodia* ± linearia, versus basin angustata, 3–4(–6) mm lata, plana, recta ad vadose curvata, obscure multinervosa, glabra, apice curvato-acuminato; *glans* (obscura) 4–13 mm supra pulvinum inserta. *Capitula* ± globosa, floribus 15–25; pedunculi 3–7 mm longi. *Flores* 4-meri; sepala libera. *Legumen* chartaceum ad tenuiter coriaceum, 5–10 cm longum, 3–4 mm latum, glabrum, pallide brunneum. *Habitationem* salinam incolens.

*Typus*: east of Wubin, Western Australia [precise locality withheld for conservation purposes], 5 September 1997, B.R. Maslin 7741 (*holo*: PERTH 04852575; *iso*: CANB, K, MEL, NSW).

*Acacia inceana* Domin subsp. *latifolia* ms, in G. Paczkowska & A.R. Chapman, West. Austral. Fl.: Descr. Cat. p. 311 (2000), *nom. inval.*

*Photographs*. WorldWideWattle [online at [www.worldwidewattle.com](http://www.worldwidewattle.com)].

Spreading, rounded, multi-stemmed *shrubs*, maturing to obconic, single-stemmed *trees* 2–4 m tall, the main stems slightly crooked and much-branched especially towards their extremities, the crown sub-dense and spreading to 2–5 m across. *Bark* grey, fibrous on main stems, smooth on upper branches. *Branchlets* glabrous or sometimes ± sparsely appressed-hairy at extremities or in axils of phyllodes. *Phyllodes* linear to linear-oblongate or linear-elliptic, narrowed towards the base, flat, mostly 4–7 cm long, 3–4(–6) mm wide, ascending to erect, straight to very shallowly incurved or recurved, glabrous (except sparsely appressed hairy when young), dull to slightly shiny, green; *longitudinal nerves* numerous, indistinct and close together; *apices* narrowed to delicately curved-acuminate, hard, non-pungent to coarsely pungent, brown tipped; *gland* inconspicuous, normally 1 (2 on a few phyllodes) on upper margin of phyllode 4–13 mm above the *pulvinus*. *Inflorescences* simple, single or paired (rarely 3) in axil of phyllodes; *heads* globular to slightly obloid, 7–8 mm long and 7 mm wide when fresh, bright light- to mid-golden, 15–25-flowered; *peduncles* 3–5 mm long when in flower, reaching 7 mm in fruit, glabrous. *Flowers* 4-merous; *sepals* free. *Pods* linear, 5–10 cm long, 3–4 mm wide, firmly chartaceous to thinly coriaceous, shallowly curved, light brown. *Seeds* longitudinal in pods, 4–6 mm long, 2–2.5 mm wide, sub-shiny, dark brown; *aril* white. (Figure 1)

*Characteristic features*. *Phyllodes* linear to linear-oblongate or linear-elliptic, narrowed towards the

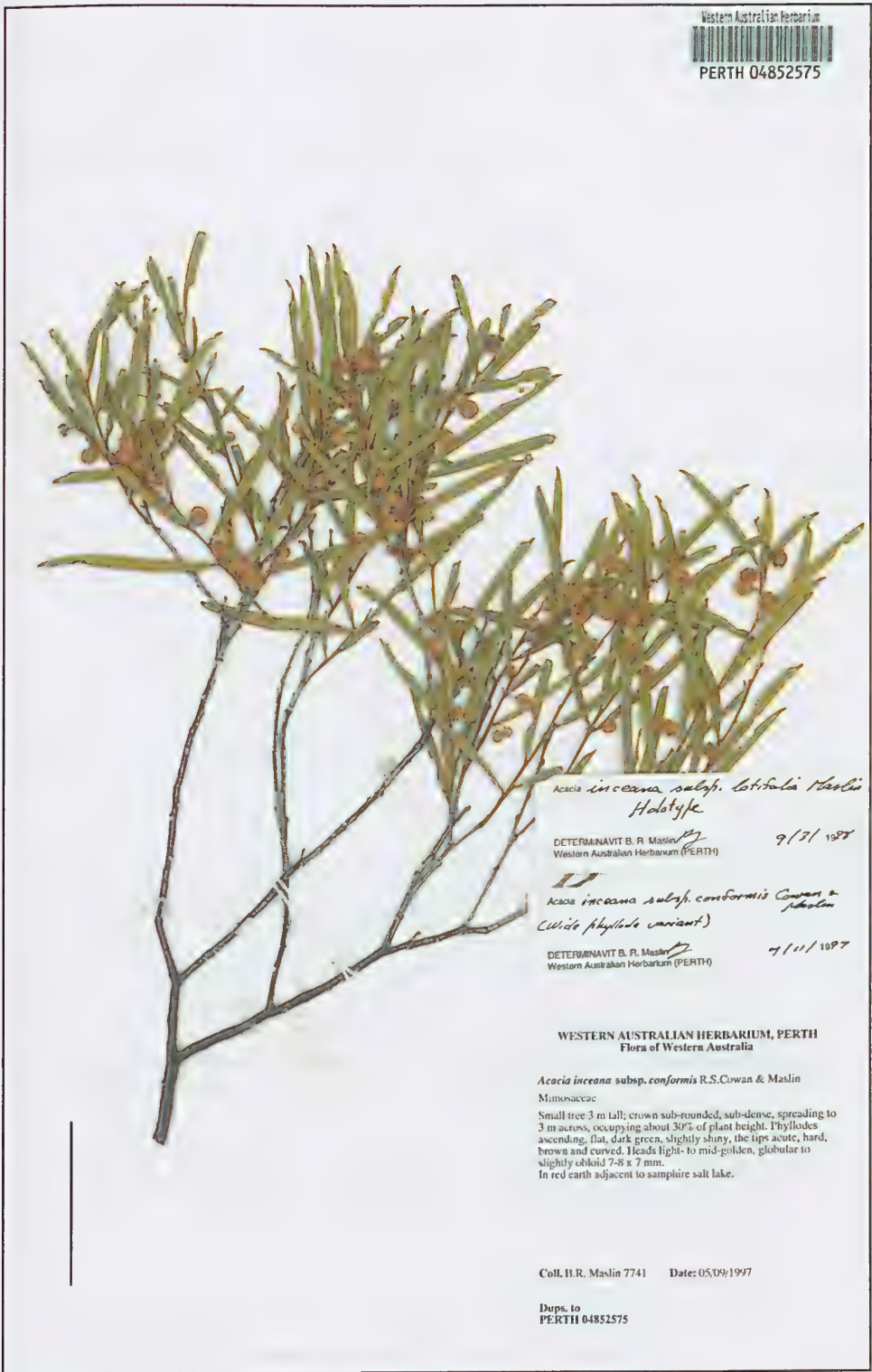


Figure 1. Holotype of *Acacia inceana* subsp. *latifolia* (B.R. Maslin 7741), scale = 5 cm.



base, 3–4(–6) mm wide, straight to very shallowly curved, glabrous (except sparsely appressed-hairy when young), longitudinal nerves numerous, indistinct and close together; *apices* narrowed to delicately curved-acuminate, hard, non-pungent to coarsely pungent, with brown tips; *gland* inconspicuous, 4–13 mm above pulvinus; *heads* globular to slightly obloid, 15–25-flowered; *peduncles* 3–5 mm long when in flower, reaching 7 mm in fruit, glabrous. *Flowers* 4-merous; *sepals* free. *Pods* linear, 5–10 cm long, 3–4 mm wide, firmly chartaceous to thinly coriaceous, light brown, glabrous. *Seeds* longitudinal in pod, *aril* white.

*Selected specimens examined.* WESTERNAUSTRALIA: [localities withheld] 28 Aug. 1976, B.R. Maslin 4210 (CANB, MEL, PERTH); 11 Dec. 1996, B.R. Maslin 7593 (MEL, PERTH).

*Distribution.* *Acacia inceana* var. *latifolia* occurs in a restricted area east of Wubin, Western Australia (Western Australian Herbarium 1998–). Further field studies are needed to determine if it is more widely distributed.

*Habitat.* Grows in red-brown sandy loam on slight rises around the margins of saline areas dominated by samphires.

*Phenology.* Flowers in August and September. Pods with mature seeds have been collected in early December.

*Conservation status.* DEC Conservation Codes for Western Australian Flora: Priority One (Atkins 2006).

*Etymology.* The subspecific name is derived from the Latin *latus* (broad) and *folium* (a leaf) and refers to the wide phyllodes that serve to distinguish this subspecies from the other two subspecies of *A. inceana*.

*Subspecies.* With the description of this new subspecies *A. inceana* Domin now comprises three subspecies, namely, subsp. *inceana*, subsp. *conformis* R.S.Cowan & Maslin and subsp. *latifolia* Maslin. These subspecies are most readily distinguished from one another by their phyllodes: quite terete in subsp. *inceana*, flat to sub-terete and 1–2 mm wide in subsp. *conformis*, flat and 3–6 mm wide in subsp. *latifolia*. Both subsp. *conformis* and subsp. *latifolia* occur in the Kalannie region.

*Affinities.* *Acacia inceana* is a member of *Acacia* sect. *Plurinerves* (Benth.) Maiden & Betche, and together with *A. lineolata* Benth. (not represented in the Kalannie region) and *A. enervia* Maiden & Blakely (represented in the Kalannie region by subsp. *explicata* R.S.Cowan & Maslin), constitute the “*A. enervia* group” (see Cowan & Maslin 1995 for discussion). *Acacia enervia* subsp. *explicata* is distinguished most reliably from *A. inceana* subsp. *latifolia* by its phyllode glands which, when present, are situated at the distal end of the pulvinus, and by its 5-merous flowers; it also has slightly narrower pods (2–2.5 mm wide) than those found on subsp. *latifolia*.

***Acacia stanleyi* Maslin, *sp. nov.***

*Frutex* 2–3.5 m alta. *Ramulis* extremitatibus flavis. *Phyllodia* secus ramulos continua, teretia, 15–30 cm longa, 1–1.5 mm diam., nervis longitudinalibus 8, inter nervos sulcata, glabra; apex acuta ad acuminata, vadose curvata ad uncinata; pulvinus nullus. *Spicae* 1 vel 2 per axillum, 25–35 mm longae, 6–7 mm diam., floribus dense dispositis; pedunculi 1–2 mm longi, appresso-pilosi. *Flores*

4-meri; sepala unita, petalis c. dimidia parte breviora. *Legumen* ± moniliforme, (5–)7–14(–16.5) cm longum, 3–5 mm latum, tenuiter coriaceum, glabrum, atro-brunneum. *Semina* longitudinalia, elliptica ad oblongo-elliptica, c. 3–4 mm longa, 2–2.5 mm lata, atra, minute rugosa et foveata. *Graniticola*.

*Typus*: north-east of Kalannie, Western Australia [precise locality withheld for conservation purposes], 10 September 1997, B.R. Maslin 7766 (*holo*: PERTH 04852869; *iso*: CANB, K, MEL, NSW, NY).

*Acacia stanleyi* Maslin ms, in G. Paczkowska & A.R. Chapman, West. Austral. Fl.: Descr. Cat. p. 325 (2000), *nom. inval.*

*Photographs*. WorldWideWattle [online at [www.worldwidewattle.com](http://www.worldwidewattle.com)].

Obconic or sometimes ± rounded *shrubs* 2–3.5 m tall, dividing at ground level into 3–5, rather slender, ascending to erect main stems commonly 1.5–3 cm diam. at their base (to 7 cm diam. on oldest plants), the crown dense or sub-dense and 1.5–3 m wide, the dead (grey) phyllodes remain attached to the branches below the living (green) crown for a considerable period of time. *Bark* dark grey, flaky and longitudinally fissured at base of oldest stems, smooth on upper branches. *Branchlets* ascending to erect, sub-glabrous to very sparsely appressed-hairy especially when young, the hairs confined to axils of phyllodes on mature branchlets, red-brown except yellow towards extremities where inflorescences are produced. *Phyllodes* continuous with branchlets (not easily separated from them), terete, 15–30 cm long, 1–1.5 mm diam., sub-rigid, ascending to erect, mostly shallowly incurved, sometimes shallowly sinuous or sub-straight, glabrous (except ± sparsely hairy on young shoots and sometimes on upper surface of mature phyllodes at their base), pale green to mid-green (but upon dying turning first yellow, then pale orange, finally grey); *longitudinal nerves* 8, the nerves raised (each nerve separated by a distinct, longitudinal furrow); *apices* acute to acuminate, straight to shallowly curved, not pungent (although tips sometimes coarsely pungent once the points have broken off as frequently occurs); *pulvinus* absent. *Inflorescences* simple, single or paired in axil of phyllodes; *spikes* 25–35 mm long and 6–7 mm in diam. when fresh (5–6 mm when dry), the flowers densely arranged, golden; *peduncles* 1–2 mm long (sometimes obscured by stamens at anthesis and then the spikes appear sessile), appressed-hairy; *receptacle* sparsely appressed or sub-appressed hairy. *Bracteoles* spatulate to sub-peltate, c. 1 mm long, claw c. as long as the inflexed, acute to sub-acute laminae. *Flowers* 4-merous, c. 1.8 mm long; *calyx* c. ½ length of the petals, divided for c. ⅓ its length into ± oblong or broadly triangular lobes, sparsely hairy; *petals* glabrous, nerveless, free. *Pods* sub-moniliform, (5–)7–14(–16.5) cm long, 3–5 mm wide, thinly coriaceous, pendulous to sub-pendulous, glabrous, dark brown over seeds, paler coloured between seeds. *Seeds* longitudinal in pods, ellipsoid to obloid-ellipsoid, 3–4 mm long, 2–2.5 mm wide, black, slightly shiny but surface minutely rugose and pitted (observe at ×10 magnification); *aril* waxy, white to pale brownish cream, darker brown at hilum. (Figure 2)

*Characteristic features*. *Shrub* with growth form reminiscent of *Calycopeplus paucifolius* (Euphorbiaceae), the dead (grey) phyllodes remaining attached to the branches below the living (green) crown for a considerable period of time. *Branchlets* red-brown except yellow towards extremities where inflorescences are produced. *Phyllodes* continuous with branchlets (not easily separated from them), terete, 15–30 cm long, 1–1.5 mm diam., sub-rigid, mostly shallowly incurved and glabrous, longitudinal nerves 8, the nerves raised (each separated by a distinct, longitudinal furrow), pulvinus absent; *spikes* 25–35 mm long and 6–7 mm in diam. when fresh, the flowers densely arranged, golden; *peduncles* 1–2 mm long (sometimes obscured by stamens at anthesis and then the spikes appear sessile). *Flowers* 4-merous; *calyx* c. ½ length of the petals, shortly dissected into ± oblong or broadly triangular lobes. *Pods* sub-moniliform, mostly 7–14 cm long, 3–5 mm wide, thinly coriaceous, glabrous.

*Seeds* longitudinal in pod, black, slightly shiny but surface minutely rugose and pitted (observe at  $\times 10$  magnification).

*Other specimens examined.* WESTERN AUSTRALIA: [localities withheld] 3 Dec. 1996, B.R. Maslin 7501 and 7503 (both PERTH); July 1959, B. Rosier 61 (PERTH); 15 May 2000, J. Wege MMV 126 (PERTH).

*Distribution.* An uncommon species endemic to the north-central wheatbelt region of south-west Western Australia where it is known from only three localities that span a distance of c. 100 km along a north-south axis (Western Australian Herbarium 1998–). Recent collections show the species as existing in the Goodlands area c. 40 km north-east of Kalannie (where it is localized but reasonably common in a single population where it occurs with *A. synoria*, which is described as new below) and the Mt Marshall area (near Beacon). A 1959 collection from Mollerin (which is located between Kalannie and Beacon) was not relocated during a recent, relatively quick search of granite rocks in that area.

*Habitat.* Grows in association with granite outcrops in hard, light brown, gritty, sandy and clayey loam in shallow soil pockets and on the fringing soil apron, in tall shrubland dominated by *Allocasuarina campestris*. Other associates in the Goodlands population include *Acacia assimilis* subsp. *assimilis*, *A. duriuscula*, *A. jibberdingensis* and *A. synoria*, and at Mt Marshall, *Calothamnus asper* and *Melaleuca uncinata*.

*Phenology.* Flowers from late July to September and pods with mature seed have been collected in early December. The little fruiting material that has been seen was gathered in 1996 from the Goodlands population where most of the plants were sterile; only a few shrubs which grew along a diffuse drainage line produced pods but these frequently contained aborted seeds, perhaps due to unfavourable seasonal conditions that year. This same reduction of seed set occurred in many other species of *Acacia* in the Kalannie region that same year.

*Conservation status.* DEC Conservation Codes for Western Australian Flora: Priority One (Atkins 2006).

*Etymology.* The botanical name commemorates the late Don Stanley in recognition of his significant contribution to landcare in the Kalannie region.

*Common name.* Stanley's Rock Wattle

*Affinities.* *Acacia stanleyi* is a member of *Acacia* sect. *Juliflorae* (Benth.) Maiden & Betche and is most closely related to *A. karina* Maslin & Buscumb (2007, this issue), which occurs only c. 50 km north of the northernmost occurrence of *A. stanleyi*. *Acacia karina* resembles *A. stanleyi* in having the same distinctive 8-nerved, long, terete phyllodes which are continuous with the branchlets, and 4-merous flowers in spicate inflorescences, but differs in that the phyllodes are more slender (0.6–1 mm in diam.), less rigid and do not persist on the branchlets for very long upon dying, the upper branchlets (where the inflorescences are produced) are reddish brown (yellow in *A. stanleyi*), the spikes are much more loosely flowered (with distinct spaces between adjacent flowers so that the receptacle is clearly visible), the peduncles are longer (3.5–7.5 mm compared with 1–2 mm in *A. stanleyi*) and the bracteoles are shorter (c. 0.5 mm long compared with 1 mm in *A. stanleyi*). The carpological features of the two species are very similar. *Acacia karina* grows mainly on banded ironstone hills (*A. stanleyi* grows on granite outcrops) and flowers slightly earlier in the season (May–July compared with July–September



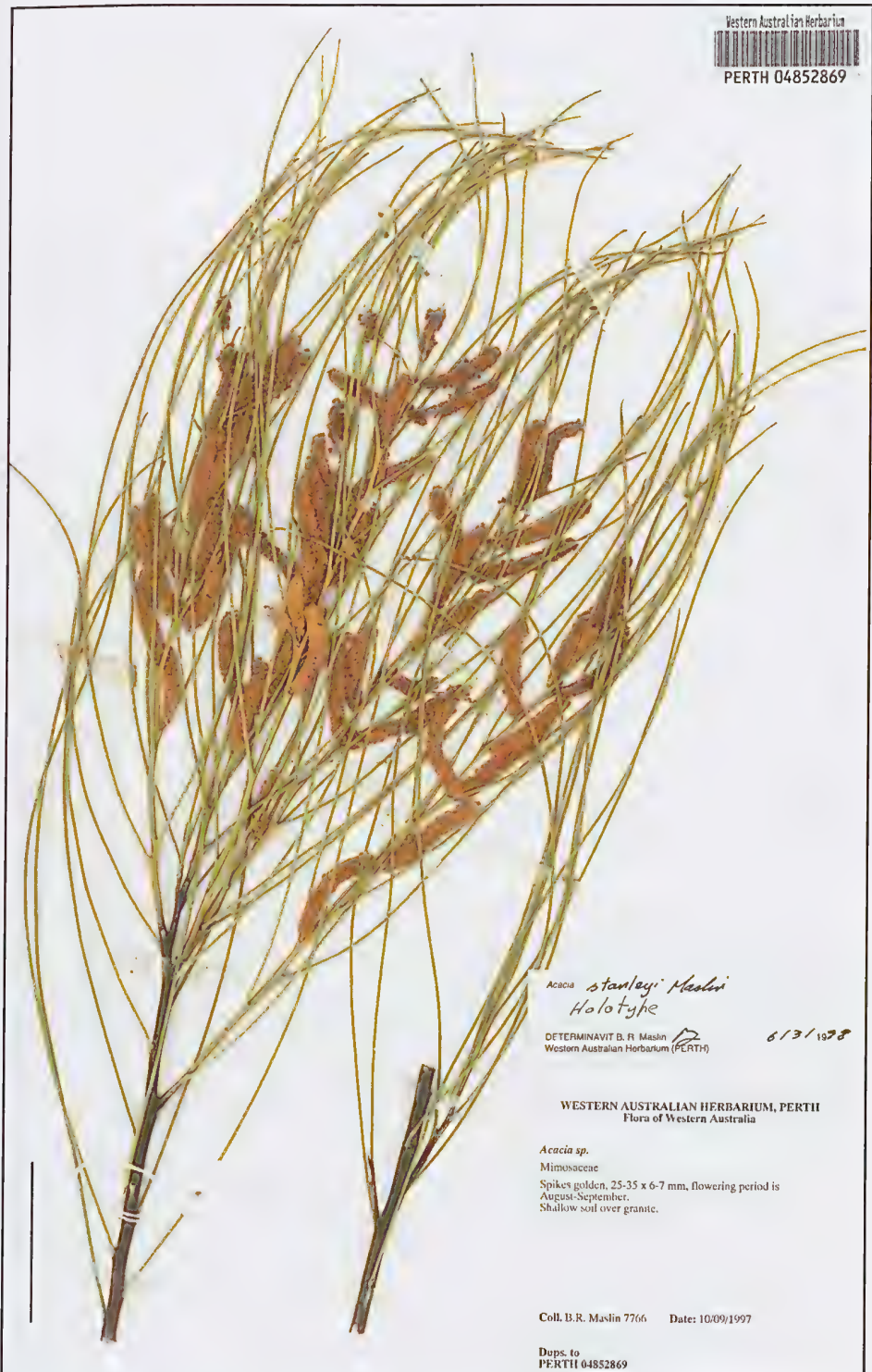


Figure 2. Holotype of *Acacia stanleyi* (B.R. Maslin 7766), scale = 5 cm.

in *A. stanleyi*). *Acacia stanleyi* and *A. karina* are closely allied to *A. jibberdingensis* Maiden & Blakely which differs most obviously from both in having (commonly flat) phyllodes with a distinct pulvinus at their base. *Acacia jibberdingensis* further differs from *A. stanleyi* in having longer peduncles (6–11 mm) and larger seeds (4.5–5.5 mm long) with only the central area slightly roughened by minute pits (the rest of the seed is smooth: observe at  $\times 10$  mag.). Both these species occur in the Kalannie region, are associated with granite rocks and at one site they are sympatric.

*Acacia longiphyllodinea* Maiden superficially resembles *A. stanleyi* in having long, terete phyllodes which are continuous with the branchlets, long, spicate inflorescences and long, narrow pods. However, the relationship is not especially close, with *A. longiphyllodinea* being readily recognized by its 5-merous flowers, often pruinose branchlets, longer (3–20 mm), glabrous peduncles, and flat pods with smooth seeds.

***Acacia synoria* Maslin, sp. nov.**

*Phyllodia* teretia, (5–)6–9(–10.5) cm longa, 0.7–1 mm diam., gracilia, nervis 8, longitudinalibus, inter nervos sulcata, apice acuminato-caudato. *Capitula* subglobosa ad obloidea; pedunculi 2–5(–6) mm longi; gemmae resinosae. *Legumen* teres, 5–9(–10) cm longum, 1–2 mm latum, tenuiter coriaceo-crustaceum, glabrum, pallide brunneum, subtiliter longitudinaliter nervosum. *Semina* obscure maculata; arillus citrinus. *Graniticola*. *Florescentia* aestivalis.

*Typus*: north-east of Kalannie, Western Australia [precise locality withheld for conservation purposes], 3 December 1996, B.R. Maslin 7502 (*holo*: PERTH 04538978; *iso*: CANB, G, K, MEL, NSW, NY, PERTH 07220677).

*Acacia synoria* Maslin ms, in G. Paczkowska & A.R. Chapman, West. Austral. Fl.: Descr. Cat. p. 326 (2000), *nom. inval.*

*Photographs*. WorldWideWattle [online at [www.worldwidewattle.com](http://www.worldwidewattle.com)].

Rounded or obconic *shrubs* 2–4 m tall, divided at ground level into 2–7 fairly straight, ascending to erect main stems, maturing to *trees* 5 m tall, single-stemmed or sparingly divided at ground level, the trunks commonly curved or slightly crooked and reaching 25 cm in diam. at their base, the crowns dense and 2–4 m wide. *Bark* grey, smooth on stems and branches but with age becoming longitudinally fissured and  $\pm$  fibrous on trunks. *Branchlets* glabrous, red-brown at extremities. *New shoots* resinous but (at least when dry), not viscid. *Phyllodes* terete, (5–)6–9(–10.5) cm long, 0.7–1 mm diam., slender, sub-rigid, erect, mostly shallowly incurved, sometimes resinous (but not viscid), glabrous (except pulvinus), light green; *longitudinal nerves* 8, the nerves raised (each nerve separated by a distinct, longitudinal furrow) and coated with a thin, shiny layer of resin especially on the young phyllodes; *apices* narrowed to acuminate, delicate, straight, curved, or sub-uncinate, with innocuous to sub-pungent point; *pulvinus* 0.5–1 mm long, orange, resinous (at least on young phyllodes), indistinctly appressed-hairy on upper surface; *gland* minute, situated on upper surface of phyllode 0–4 mm above distal end of pulvinus. *Inflorescences* simple, 1 or 2 in axil of phyllodes; *heads* sub-globular to obloid or very shortly cylindrical, 5–6 mm long and 4–5 mm wide when fresh, light golden; *young buds* resinous; *peduncles* 2–5(–6) mm long, glabrous; *basal peduncular bract* single, sub-persistent; *receptacle* 1.5–3 mm long, glabrous. *Bracteoles* linear-spathulate, c. 0.7 mm long, similar to sepals except the laminae a little larger. *Flowers* 5-merous, c. 1.5 mm long; *sepals* free, c.  $\frac{1}{3}$  the length of the petals, linear-spathulate, the lobes ciliolate otherwise glabrous; *petals* joined for c.  $\frac{1}{2}$  their length,



glabrous, 1-nerved. *Pods* terete, scarcely to shallowly constricted between the seeds, 5–9(–10) cm long, 1–2 mm wide, straight to shallowly curved, thinly coriaceous-crustaceous, pendulous, glabrous, light brown, finely longitudinally nerved (the nerves yellowish or light brown). *Seeds* longitudinal in the pods, obloid to ellipsoid, 2.5–3 mm long, 1–1.5 mm wide, shiny to sub-shiny, light brown but obscurely mottled greyish or pale yellowish; *areole* 'u'-shaped, open towards the hilum, very small (0.2–0.3 mm × c. 0.1 mm); *aril* terminal, folded beneath the seed and almost as long as seed, lemon yellow. (Figure 3)

*Characteristic features.* Trees to 5 m tall, the trunks commonly curved or slightly crooked. *Branchlets* glabrous. *Phyllodes* terete, long (normally 6–9 cm) and slender, sub-rigid, erect, mostly shallowly incurved, glabrous (except obscurely appressed-hairy on upper surface of pulvinus), light green, with 8 raised longitudinal nerves (each separated by a distinct, longitudinal furrow). *Heads* sub-globular to obloid or very shortly cylindrical, light golden; *young buds* resinous; *peduncles* short (mostly 2–5 mm long), glabrous. *Flowers* 5-merous, *sepals* free, linear-spathulate. *Pods* terete, scarcely to shallowly constricted between the seeds, long and narrow (1–2 mm wide), thinly coriaceous-crustaceous, glabrous, light brown, finely longitudinally nerved. *Seeds* longitudinal in the pods, light brown but obscurely mottled greyish or pale yellowish; *areole* very small; *aril* almost as long as seed, lemon yellow.

*Other specimens examined.* WESTERN AUSTRALIA: [localities withheld] 4 Dec. 1996, B.R. Maslin 7518 (PERTH); 31 Oct. 1993, S. Webster s.n. (PERTH 03286916); 21 Nov. 1992, R.J. Cranfield 8558 (PERTH).

*Distribution.* Of restricted occurrence in south-west Western Australia where it is locally abundant in two populations (c. 10 km apart; it is sympatric with *A. stanleyi* in one of these populations) north-east of Kalannie and also near Mt Gibson, c. 30 km to the north (Western Australian Herbarium 1998–).

*Habitat.* Grows in light brown sandy loam (NE of Kalannie) or red sandy clay (Mt Gibson) in association with granite rocks. In the Kalannie region it has also been found in yellow-brown gravelly sand on the edge of a gravel pit, but it is probable that these plants are the result of seed that had been washed down-slope from an adjacent granite rock; these plants had not established in the surrounding vegetation.

*Phenology.* Flowers from late October to December with plants flowering from an early age (when c. 1 m tall). Few pods were collected from some plants in December 1996 and it is assumed that these were the result of the previous year's flowering event; much of the seed, however, was aborted. Further study is needed to properly understand the fruiting phenology of this species.

*Conservation status.* DEC Conservation Codes for Western Australian Flora: Priority Two (Atkins 2006).

*Etymology.* The specific epithet is from the Greek *synoria* (borderland), in reference to the species' occurrence on the boundary between the wheatbelt region and the arid zone.

*Common name.* Goodland's Wattle.

*Affinities.* *Acacia synoria* does not appear to have any particularly close relatives. In having long, terete, strongly 8-nerved phyllodes (deeply furrowed between each nerve) *A. synoria* is similar to a number of other Western Australian acacias, especially the more southerly distributed, granite rock species,



Figure 3. Holotype of *Acacia synoria* (B.R. Maslin 7502), scale = 5 cm.

*A. sessilispica* Maiden & Blakely, which is readily distinguished by its sessile, spicate inflorescences, 4-merous flowers, broader pods (mostly 3–4.5 mm wide) and white seed arils. Species possessing superficially similar phyllodes, and which grow in the general vicinity of where *A. synoria* is found, include *A. aulacophylla* R.S.Cowan & Maslin (distinguished by phyllodes having plumose tips, heads globular on peduncles 5–8 mm long, pods linear and 5–6 mm wide, and seed arils white), *A. speckii* R.S.Cowan & Maslin (distinguished by heads globular, peduncles 5–10 mm long, pods moniliform and 4–6 mm wide, and phyllodes generally longer, thicker and more rigid, i.e. mostly 8–12 cm × 1–1.5 mm) and *A. stanleyi* Maslin (readily distinguished by phyllodes longer and continuous with the branchlets, inflorescences spicate and larger, flowers 4-merous and pods broader: see description above).

*Variant.* There is a variant represented by a few specimens from near Burakin (c. 20 km south of Kalannie) and Moorine Rock (c. 200 km south-east of Kalannie) that is remarkably similar-looking to *A. synoria* in its phyllodes and inflorescences but which differs significantly in the following ways: bark exfoliating in a Minni Ritchi fashion, branchlets ± appressed-hairy around base of phyllodes otherwise glabrous, phyllodes ± glaucous, petals hairy, pods sub-moniliform and very obscurely longitudinally nerved, seeds uniformly mid-brown (not mottled), arils white and shorter than the length of the seed (see B.R. Maslin 4440, 4474 and 6707; all PERTH). Further study of this entity is needed to ascertain the taxonomic status of this variant, however, it is not referable to *A. synoria*; the Minni Ritchi bark suggests affinities to *A. ephedroides* Benth. This variant is housed at PERTH under the phrase name *Acacia* sp. Moorine Rock (B.R. Maslin 4474).

### Acknowledgements

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